

STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0044075; AI 31209; PER20090002** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

- I. **THE APPLICANT IS:** Town of Jonesville
Jonesville Wastewater Treatment Facility
P.O. Box 428
Jonesville, LA 71343
- II. **PREPARED BY:** Rachel Davis
- DATE PREPARED:** June 12, 2009
- III. **PERMIT ACTION:** reissue LPDES permit LA0044075, AI 31209; PER20090002

LPDES application received: April 3, 2009

EPA has not retained enforcement authority.

LPDES permit issued: November 1, 2003
LPDES permit expired: October 31, 2008

IV. FACILITY INFORMATION:

- A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the Town of Jonesville.
- B. The permit application does not indicate the receipt of industrial wastewater.
- C. The facility is located adjacent to airport, ¼ mile from Airport Road in Jonesville, Catahoula Parish.
- D. The treatment facility consists of a single celled oxidation pond with chlorine disinfection.
- E. Outfall 001

Discharge Location: Latitude 31° 37' 9" North
Longitude 91° 50' 4" West

Description: treated sanitary wastewater

Design Capacity: 0.424 MGD

Type of Flow Measurement which the facility is currently using:
Totalizing Meter/Continuous Recorder

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V. RECEIVING WATERS:

The discharge is into an unnamed drainage ditch, thence into Little River, thence into Black River in segment 081301 of the Ouachita River Basin. This segment is listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 081301 of the Ouachita River Basin are as indicated in the table below^{1/}:

Degree of Support of Each Use						
Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Not Supported	Full	Not Supported	N/A	N/A	N/A	N/A

^{1/}The designated uses and degree of support for Segment 081301 of the Ouachita River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 081301 of the Ouachita River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated November 24, 2008 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

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For additional information, contact:

Ms. Rachel Davis
 Water Permits Division
 Department of Environmental Quality
 Office of Environmental Services
 P. O. Box 4313
 Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Final Effluent Limits:

Subsegment 081301, Little River, Archie Dam to Ouachita River, is listed on LDEQ's Final 2006 303(d) List as impaired for pathogen indicator, dissolved oxygen, and sulfates. To date no TMDLs have been completed for this waterbody. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL. Until completion of TMDLs for the Ouachita River Basin, those suspected causes for impairment which are not directly attributed to the sanitary wastewater point source category have been eliminated in the formulation of effluent limitations and other requirements of this permit. Additionally, suspected causes of impairment which could be attributed to pollutants which were not determined to be discharged at a level which would cause, have the reasonable potential to cause or contribute to an excursion above any present state water quality standard were also eliminated

Dissolved Oxygen

To protect against the potential for oxygen consuming pollutants that could cause instream DO problems, BOD₅ limitations have been established in the permit.

Sulfates

Based on the size and nature of the facility, the department believes there is little potential for the discharge to cause or contribute to the sulfate impairment of this subsegment. Therefore, no limitations for sulfates will be required of this facility.

Pathogen Indicators

To protect the receiving waterbody against high levels of pathogenic organisms, fecal coliform limitations have been established in the permit.

OUTFALL 001

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
BOD ₅	106	30 mg/l	45 mg/l	Limits are set in accordance with the 1980 Ouachita River Basin Plan for facilities of this treatment type and size and the permit issued by EPA on August 29, 1991.

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Effluent Characteristic	Monthly Avg (lbs./day)	Monthly Avg	Weekly Avg	Basis
TSS	318	90 mg/l	135 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.

*Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement. LAC 33:IX.709.B references LAC 33:IX.711 which express BOD₅ and TSS in terms of concentration.

Other Effluent Limitations:**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5., the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

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X. PREVIOUS PERMITS:

LPDES Permit No. LA0044075: Issued: November 1, 2003
Expired: October 31, 2008

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Monthly Avg.</u>	<u>Weekly Avg.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	Continuous	Recorder
BOD ₅	10 mg/l*	15 mg/l*	1/week	Grab
TSS	15 mg/l*	23 mg/l*	1/week	Grab
Ammonia-Nitrogen	5 mg/l	10 mg/l	1/week	Grab
Fecal Coliform Colonies	200	400	1/week	Grab

The permit contains pollution prevention language.

*The previous permit limitations were based on the permit issued by EPA on June 15, 1991. EPA sent a modification to that permit on August 29, 1991 receding the 10/15 limits and establishing 30/90 limitations for the facility. The previous permit issued on October 23, 2003, effective November 1, 2003, did not reflect these changes, therefore this permit will return to the previous limitations of 30/90 based on the permit issued by EPA on August 29, 1991 and the 1980 Ouachita River Basin Plan.

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:**A) Inspections**

A review of the files indicates the following inspections were performed during the period beginning **January 2006** and ending **May 2009** for this facility.

Date: May 1, 2009

Inspector: Michael Accettella

Findings and/or Violations:

1. Facility operating under an expired permit
2. Facility had many days of hydraulic overload, exceeding its design capacity
3. Facility flow meter calculation sheet showed a 225% error rate
4. Facility had TSS excursions in January, February, and March 2009 and BOD excursions in February and March 2009.

B) Compliance and/or Administrative Orders

A review of the files indicates that no compliance orders have been issued against the facility in the past two years

C) DMR Review

A review of the discharge monitoring reports for the period beginning **September 2006** through **January 2009** has revealed the following violations:

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Period of Excursion	Parameter	Outfall	Permit Limit	Reported Quantity
March 2006	BOD	001	10 mg/l	36 mg/l
	BOD		15 mg/l	64 mg/l
	BOD(mass)		35 lbs/day	176 lbs/day
	TSS		15 mg/l	49 mg/l
	TSS		23 mg/l	98 mg/l
April 2006	TSS(mass)	001	53 lbs/day	246 lbs/day
	BOD		10 mg/l	46 mg/l
	BOD		15 mg/l	62 mg/l
	BOD(mass)		35 lbs/day	165 lbs/day
	TSS		15 mg/l	62 mg/l
June 2006	TSS	001	23 mg/l	92 mg/l
	TSS(mass)		53 lbs/day	215 lbs/day
	BOD		10 mg/l	31 mg/l
	BOD		15 mg/l	68 mg/l
	BOD(mass)		35 lbs/day	80 lbs/day
July 2006	TSS	001	15 mg/l	66 mg/l
	TSS		23 mg/l	94 mg/l
	TSS(mass)		53 lbs/day	170 lbs/day
	BOD		10 mg/l	45 mg/l
	BOD		15 mg/l	108 mg/l
August 2006	BOD(mass)	001	35 lbs/day	119 lbs/day
	TSS		15 mg/l	113 mg/l
	TSS		23 mg/l	117 mg/l
	TSS(mass)		53 lbs/day	304 lbs/day
	TSS		15 mg/l	75 mg/l
September 2006	TSS	001	23 mg/l	116 mg/l
	TSS(mass)		53 lbs/day	215 lbs/day
	Fecal		200	1,115
	Fecal		400	1,600
	BOD		10 mg/l	12 mg/l
October 2006	TSS	001	15 mg/l	43 mg/l
	TSS		23 mg/l	45 mg/l
	TSS(mass)		53 lbs/day	95 lbs/day
	BOD		10 mg/l	13 mg/l
	BOD(mass)		35 lbs/day	63 lbs/day
December 2006	TSS	001	15 mg/l	38 mg/l
	TSS		23 mg/l	67 mg/l
	TSS(mass)		53 lbs/day	179 lbs/day
	BOD		10 mg/l	13 mg/l
	BOD(mass)		35 lbs/day	37 lbs/day
January 2007	TSS	001	15 mg/l	58 mg/l
	TSS		23 mg/l	66 mg/l
	TSS(mass)		53 lbs/day	168 lbs/day
	BOD		10 mg/l	13 mg/l
	BOD(mass)		35 lbs/day	37 lbs/day
March 2007	TSS	001	15 mg/l	27 mg/l
	TSS		23 mg/l	37 mg/l
	TSS(mass)		53 lbs/day	159 lbs/day
	BOD		10 mg/l	23 mg/l
	BOD		15 mg/l	23 mg/l

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	TSS		23 mg/l	56 mg/l
June 2008	BOD	001	10 mg/l	41 mg/l
	BOD		15 mg/l	45 mg/l
	TSS		15 mg/l	64 mg/l
	TSS		23 mg/l	71 mg/l
July 2008	BOD	001	10 mg/l	24 mg/l
	BOD		15 mg/l	27 mg/l
	BOD(mass)		35 lbs/day	50 lbs/day
September 2008	BOD	001	10 mg/l	20 mg/l
	BOD		15 mg/l	28 mg/l
	TSS		15 mg/l	47 mg/l
	TSS		23 mg/l	67 mg/l
October 2008	BOD	001	10 mg/l	28 mg/l
	BOD		15 mg/l	45 mg/l
	TSS		15 mg/l	35 mg/l
	TSS		23 mg/l	47 mg/l
November 2008	TSS	001	15 mg/l	29 mg/l
	TSS		23 mg/l	40 mg/l
January 2009	BOD	001	10 mg/l	12 mg/l
	TSS		15 mg/l	46 mg/l
	TSS		23 mg/l	57 mg/l
March 2009	BOD	001	10 mg/l	22 mg/l
	BOD		15 mg/l	26 mg/l
	BOD(mass)		35 lbs/day	81 lbs/day
	TSS		15 mg/l	64 mg/l
	TSS		23 mg/l	106 mg/l
	TSS(mass)		53 lbs/day	231 lbs/day

*Please note that the facility did not submit DMR's from April 2007- April 2008.

* Based on the DMR review, it shows that the facility can meet the 30/90 limitations established in this reissued permit.

**SBA went out to the City of Jonesville to help them fill out their application. At this time they did not note any areas of concern other than their permit was expired.

XII. ADDITIONAL INFORMATION:

The Louisiana Department of Environmental Quality (LDEQ) reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

This permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(C) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act or more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's, if the effluent standard, limitations, water quality studies or TMDL's so issued or approved:

- Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- Controls any pollutant not limited in the permit; or
- Requires reassessment due to change in 303(d) status of waterbody; or

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- d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.424 MGD.

Effluent loadings are calculated using the following example:

$$\text{BOD: } 8.34 \text{ lb/gal} \times 0.424 \text{ MGD} \times 30 \text{ mg/l} = 106 \text{ lb/day}$$

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between **0.1** and **0.5** MGD.

Effluent CharacteristicsMonitoring Requirements

	<u>Measurement</u>	<u>Sample</u>
	<u>Frequency</u>	<u>Type</u>
Flow	Continuous	Recorder
BOD ₅	2/month	Grab
Total Suspended Solids	2/month	Grab
Fecal Coliform Bacteria	2/month	Grab
pH	2/month	Grab

Pretreatment Requirements

Due to the absence of pretreatment categorical standards for the indirect discharges listed above or the discharge is of sanitary wastewater only, it is recommended that LDEQ Option 1 Pretreatment Language be included in LPDES Permit LA0038521.

This language is established for municipalities that do not have either an approved or required Pretreatment program. This recommendation is in accordance with 40 CFR Part 403 regulations, the General Pretreatment Regulations for Existing and New Sources of Pollution contained in LAC Title 33, Part IX, Chapter 61 and the Best Professional Judgement (BPJ) of the reviewer.

Pollution Prevention Requirements

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report **each year** for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

The audit evaluation period is as follows:

Audit Period Begins	Audit Period Ends	Audit Report Completion Date
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

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XIII. TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a reissue permit for the discharge described in this Statement of Basis.

XIV. REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Town of Jonesville, Jonesville Wastewater Treatment Facility, April 3, 2009.